



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,039	10/27/2003	Shigeru Suzuki	FP03-105US	5741
1218	7590	01/07/2005	EXAMINER	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			PEDDER, DENNIS H	
			ART UNIT	PAPER NUMBER
			3612	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/695,039

Applicant(s)

SUZUKI ET AL.

Examiner

Dennis H. Pedder

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 9 is/are rejected.
- 7) ☒ Claim(s) 4, 6-8, 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knettle et al. in view of Hu et al..

Knettle et al. have the substantially tubular links 46 pivotally connected for bending in a plane about substantially parallel axes (the asserted elliptical hole 60 is an extremely minor deviation from parallel, hence “substantially parallel”) with a round bundle of cables 50 extending through a cable accommodating portion, the cables stacked within the bundle both side by side and vertically to encompass the interior height of the link, but leaving empty space at either side of the bundle.

Art Unit: 3612

Hu et al. teach that cables within a bendable sheath may be flexible flat cables 42 each with a plurality of conductors 40 and with the cables filling the space within the link. It would have been obvious to one of ordinary skill to provide in Knettle et al. flexible flat cables as taught by Hu et al. in order to maximize the space utilization within the link. Stacked flat cables are seen to be an obvious expedient, depending on thickness of such. Applicant's remarks regarding such stacked flat cables being a hindrance to transverse bending is not deemed effective as such transverse bending is minor at best. Note the position of the door hinge 30 when fully open in figure 3. Note that the claims are open ended as to the number of flat cables and the clearance between such and the sides of the link, so that small width cables and a small stack would not interfere in any significant manner with a small transverse bending as disclosed by Knettle et al. It would have been obvious to one of ordinary skill to provide in Knettle et al. flat cables as taught by Hu et al. as an art recognized equivalent.

As to claim 9, the axes are parallel to the width of the flat cables.

***Allowable Subject Matter***

4. Claims 13-14 are allowed.
5. Claims 4, 6-8, 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments filed 11/18/2004 have been fully considered but they are not persuasive. The examiner would urge counsel to step back and consider what is being advocated: namely patent protection and withdraw from the public domain the mere use of flat cables in place of round cables in the environment of Knettle et al.. Besides being considered an obvious expedient, does counsel believe that the lack of a direct patent document as evidence to this feature is sufficient to ensure the applicant such protection for a twenty year period from filing? Consider the high probability that such asserted protection would never stand court scrutiny in the examiner's opinion. Meanwhile it has been indicated that patent protection will be granted for structural features of the link as listed above. However, if applicant traverses this analysis, appeal may now be taken for further opinion.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3612

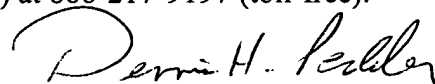
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178.

The examiner can normally be reached on 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dennis H. Pedder  
Primary Examiner  
Art Unit 3612

1/5/05

DHP  
1/5/2005